NDIAN NOTES

SPRING 1974 • X NO 2

MUSEUM OF THE AMERICAN INDIAN

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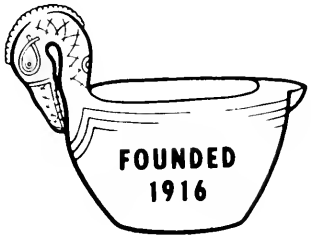
SILVER DUCKBILL PENDANT

So called from their appearance, these heavy cast silver pendants were presumably worn as pendants by early Calusa Indians. Collected by Montague S. Tillant.

Ochopee Slough	23/7940	*ca.* 1500-1600
Glade County, Florida		L: 3¼ inches

IN THIS ISSUE



Kathy Berkman, Editor
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SOME UNUSUAL GRAVE GOODS FROM A MISSISSIPPIAN BURIAL MOUND

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New York University

In January of 1876, a burial mound of the prehistoric Amerindian Mississippian cultures, which flourished in the Midwest from around A.D. 900 to 1500, was removed to serve as fill for the Chicago and Alton railroad dike across Long Lake. The lake, an old slough which drains into Cahokia Creek, is located some twelve miles north of East St. Louis, St. Clair County, Illinois.

Fortunately, Henry R. Howland (1877) visited the site on January 20, 1876, and witnessed the removal of the remnants of this once large conical mound which originally measured almost 120 feet in diameter at the base and had stood about 27 feet high. He reported that bone and associated artifacts had been noticed by the laborers, but that grave lots had already disappeared into the causeway fill. Interestingly enough, he also mentioned that there were few reports of anything of notice in the upper ten feet that had been removed prior to his inspection of the site.

William R. McAdams (1887:35), who had also made observations at the site during and after the destruction period, gives somewhat different dimensions, stating that the mound was 300 feet square on a side and 30 feet high. Whatever the shape and real dimensions may have been, the mound must have been a prominent landmark on the flat terrain of the Mississippi bottoms. McAdams (1887:35-36) also made an intriguing and all too brief reference to the contents of the mound: "In a very large mound...in the American Bottom at Mitchell, in Madison County, Illinois, there was found, in contact with a number of copper implements and ornaments, a number of teeth of the buffalo. These we have in our possession. They are stained with the oxide of copper, and perfectly preserved. They had most probably been worn as ornaments..." McAdams proposes that the garments of the wearer were almost completely covered with beautiful ornaments of copper and that the owner had possessed magnificent flint weapons ("axe," spear, and arrows) from which the chipping scars had been obliterated by grinding and polishing.

McAdams observed that these buffalo remnants were the only ones that he had ever encountered in his numerous forays into rock shelters, burial mounds, and the middens of the villages inhabited by prehistoric cultures in the central Mississippi Valley. In this he was quite correct. The work of

many archeologists in subsequent decades verified that there was an hiatus of several thousand years between the last glacial episode in Illinois (*ca.* 18,000-9,000 B.C.) and A.D. 1300 when there is virtually no trace of the buffalo east of the Mississippi River.

Aside from McAdams' remarks (1881, 1887) and Howland's more comprehensive report (1877:204-211), mention of this Madison County mound has virtually vanished from the archeological literature, aside from brief references to the earlier publications by Snyder (1909:71-92) and Norton (1912) in his centennial history of Madison County. Even the existence of the artifacts retrieved by Howland and others from the workmen is little known among contemporary archeologists.

Several years ago, Robert Hall reported to James Porter of the University of Illinois that copper artifacts from the Mitchell Burial Mound were in the collections of the Illinois State Museum in Springfield, Illinois. Professor Porter's interest in tracking down the material from the Mitchell Mound had been stimulated by the extensive salvage operations at the Mitchell Site, a substantial Mississippian town, which had been conducted under his supervision during construction of an interstate highway (Porter: 1969). Today only a small portion of this once great center, with its eleven conical and pyramidal mounds, plaza, and residential areas, has survived the encroachment of urban and industrial sprawl and the devastation of highway construction.

In 1971, while I was examining and classifying artifacts from the extensive Illinois collections at the Research Annex of the Museum of the American Indian, I was delighted to discover another group of artifacts from the Mitchell Burial Mound. Of even greater interest, the bulk of the material seemed to be the items actually described and illustrated by Howland in his report to the Buffalo Society of Natural Science in 1877. Since Professor Porter is preparing a comprehensive monograph on the excavations of this mound as well as other mounds and residential areas at the Mitchell Site, I shall not include a full range of technical data about the artifacts, but instead, make only some general explanations as to why they are of unusual interest today.

One reason is that the artifacts come from a satellite community of Cahokia (Fowler 1969; Moorehead 1928), a great fortified, prehistoric, metropolitan center of a civilization that dominated the central Mississippi valley from before A.D. 1000 to early in the 1400's. This once little-appreciated metropolis is now being called the Teotihuacan of the North with good reason by knowledgeable archeologists. A second reason of a more technical nature, is that a number of items are made from perishable organic materials such as cloth or matting, furs and other organic

materials, and wood, which are rarely recovered from prehistoric sites in eastern North America. A third cause for interest is the scope of the procurement system that provided the exotic raw materials that eventually ended in the burial mound. Finally, certain artifacts are of theoretical interest, illustrating the ever-present forces that stifle deviations from cultural norms in some aspects of society while permitting rapid change in other spheres of social activity.

My discussion will be confined to remarks on technology and points relevant to social change. First of all it should be useful to know precisely in Howland's own words what he saw during the destruction of the mound (p. 207):

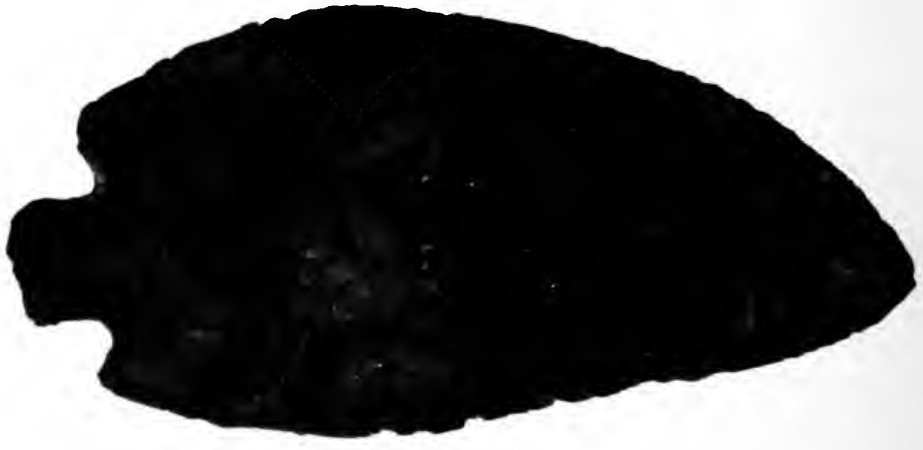
> During the present excavation...the workmen found, at a height of four or five feet above the base of the mound, a deposit of human bones from six to eight feet in width, and averaging some eight inches in thickness, which stretched across the mound east to west as though the remains had been gathered together and buried in a trench. On this level, scattered about within an area of six or eight feet square, and perhaps twenty feet from the southeasterly side of the mound, were discovered a number of valuable relics, together with a large quantity of matting ...

Howland also comments that a day or two later, another mass of bones was found on the northwest side of the mound near its base. The artifacts here consisted only of shells of *Busycon perversum,* a marine species native to certain areas along the Atlantic and Gulf of Mexico sides of Florida. Howland observed that many of these shells had been altered and cut, with sections removed, suggesting that they were primarily a source of raw materials. Artifacts manufactured from these marine shells seem to have been items of value to Indians in eastern North America from the fourth millennium B.C. to historic times (Winters 1968). Probably the three *Busycon* shells in the museum collections (MAI 10/3347) that have had the tops and other portions cut away as well as a thick triangular section of marine shell (MAI 10/3346) were from this northwestern deposit.

These and other *Busycon sp.* shells may well have been part of the source materials that were used to manufacture the many marine shell ornaments discovered in the southeastern burial area: eighty-four cylindrical conch beads (MAI 10/3350); eighty-six barrel-shaped, conch columella beads (MAI 10/3349); three pear-shaped conch beads (MAI 10/3344); a knobbed, conch columella earplug (MAI 10/3339); a globular conch columella bead (MAI 10/3343); thirty-five disc-shaped conch beads (MAI 10/3342); twenty-four bi-pointed marine shell pendants (MAI 10/3341); and two large, curved tubular shell beads (MAI 10/3340). Five snail shell beads (MAI 10/3345) were also made from exotic raw materials of marine origin. (Representative examples are shown on Page 37.)

Left to Right:
10/3348; 10/3339 Shell ear plug; 10/3346 Shell ornament; 10/3347 Columella of *fulgur perversus* shell, 6" long; 10/3338; 10/3341 Long bi-pointed shell pendant & fragments of same (3 specs.); 10/3342 Shell disc beads (4 specs.); 10/3344 Large pear-shaped shell; 10/3343 Large globular shell bead. Collected in 1875. Mitchell Mound, Illinois County, Illinois.

Most of the other exotic raw materials seem to have been associated with the southeastern burial area, and were manufactured from native copper, presumably from Ile Royale or the Keewatin Peninsula in Lake Superior. Many of these items (Page 42) might best be considered ornaments and ritual equipment, with the boundaries between the two often being difficult to define. Unlike the massive copper implements and ornaments typical of preceding Woodland cultures, the copper objects in the Mitchell Burial Mound generally consisted of thin sheet copper hammered into shape as in the case of the copper turtle rattles, (MAI 10/3327) or appliqued over bone as in the case of the three spool-shaped ear ornaments (MAI 10/3328, 3329, 3330), and the two deer mandible pendants or mask elements (MAI 10/3333, 3334); or over wood as exemplified in the five triangular wooden pendants (MAI 10/3337); and a thin, copper sheathed stick (MAI 10/3331). The only solid copper object in the collection is a five-toothed scarifier made of five pointed copper rods that had been joined together by binding with fibrous material (MAI 10/3332). These objects are often mistakenly referred to as combs or ornaments, but their general attributes and contexts satisfy neither of these categories, and they very much resemble bone and metal objects that were used by a variety of historic tribes. The steel sets of needles were used by the Chippewa in curing rituals (Ritzenthaler 1953:195); the Delaware use of toothed gar jaws ranged from punishment of errant youths to the ritual purification of adult males (Speck 1937:107).



Large chipped stone knife blade. Mitchell Mound, Madison County, Illinois. MAI/HF 10/3352. 4" x 8½".

Apparently the large ceremonial blade (MAI 10/3352) was also from this southeastern burial area. A shaly black chert had been used, and I know of no source for this raw material anywhere in the vicinity of the Mitchell Site. This particular artifact, incidentally, was not mentioned by Howland, although he does describe a bi-pointed Cahokia knife (p. 210), which is not present in the Museum collections.

It is possible that a residual group of items may have been derived from exotic sources. These include a bi-pointed bone object (MAI 10/3348), possibly a bone hairpin, and five "awl" sections (MAI 10/3348). A broken deer incisor pendant (MAI 10/3338), perforated from both sides near the root, may well have been of local origin. Chert items include a section of a "Cahokia" knife made from a tan fossiliferous chert of unknown origin; a circular chopper or core residue, with some use damage on its alternately chipped edge; a free flake from an unknown chert source, with one edge chipped to form a concave scraping edge showing some use damage; and an unutilized spall from chert of unknown origin; most of these cherts were probably derived from sources at some distance from the Mitchell Site. Both the cherts used in manufacturing the Cahokia knife and the side scraper had been thermally treated to improve their chipping qualities. A lump of red ochre was also probably secured elsewhere, although the source of this pigment need not have been very distant.

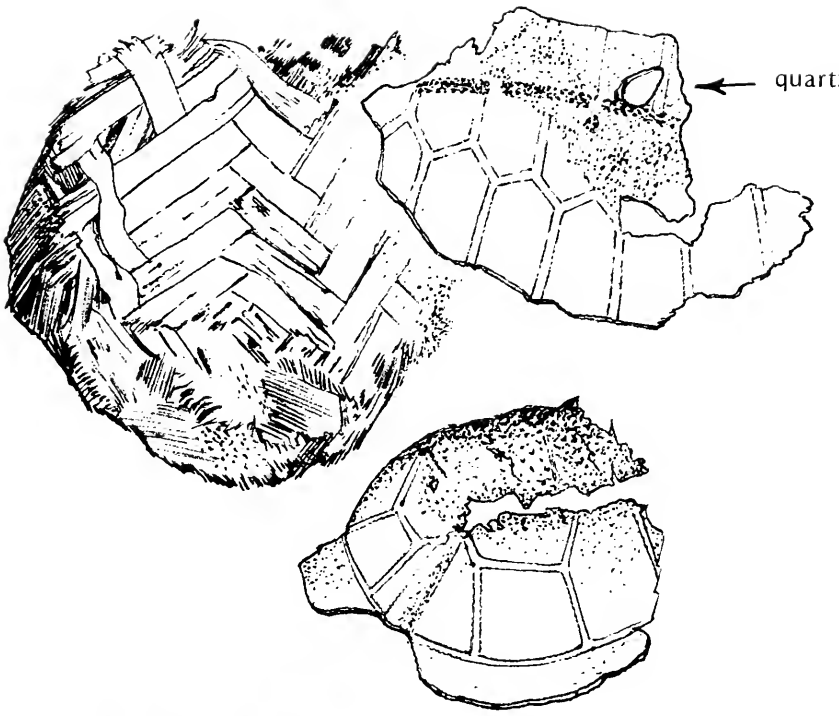
As mentioned previously, many of the artifacts procured by Howland had been carefully wrapped in layers of organic materials (MAI 10/3326, 3335). Some of these look as fresh as the day that they were made, and in view of the rapid deterioration of such items in the Indian burial mounds and towns of the Mississippi Valley, I feel that their deposition could have occurred no more than three or four centuries ago, since there are no indications of factors that would have specially favored the preservation of matting and fabric. It is true that some organic materials were in contact with paper-thin sheet copper objects, but they show little or no impregnation from preservative copper salts, and cloth and matting were preserved in association with shell beads, which have no preservative qualities, and in isolated localities within the burial area.

Apparently most of the items from the Southeastern burial area had been wrapped in coarse cloth or matting or, in selected cases, in several layers of fabric, organic tissues, and matting. One of the copper turtle rattles (Howland: 208) was wrapped in a woven cloth of vegetable fiber, perhaps cedar bark. Overlying this inner coat was a soft, brown fabric made of twisted strands laid or matted together, the raw material probably having been rabbit hair. Finally, there was a layer of non-striated muscular

fiber, possibly from the intestine or bladder of an animal. Similar wrappings are described for the copper sheathed deer mandible pendants or mask elements. Further studies of these coverings should tell us much more about the weaving art of the eastern Amerindians which we know had reached a high level of sophistication, but have not been studied in adequate detail.

But aside from the preceding technical aspects of the artifacts, there were two other striking points illustrated by the grave goods. One of these derives from inspection and interpretation of the copper turtle shell replicas, which so impressed the Marquis de Nadaillac (1885:178) that he referred to them as jewels of great value. First of all, they can clearly be identified as miniature examples of the box turtle, *Terrapene sp.* In addition, a small pebble of white quartzite was adhered to the interior of one of the two examples available for inspection. These two factors are sufficient to identify the objects as examples of turtle rattles, which played an important role in the rituals of the eastern Amerindians for thousands of years. In an earlier study (Winters 1969), it was shown that the basic form had appeared as early as 3200 B.C. (Carbon-14 date corrected by dendrochronologic calibration) in upper New York state at Lamoka, a site occupied by a group of culturally advanced hunters and gatherers. Three elements have remained constant in the manufacture of these rattles. First, for over five thousand years the box turtle, *Terrapene terrapene carolina,* has been the appropriate species, with other species being substituted occasionally in marginal areas beyond the normal range of the box turtles. There is historic evidence, however, that efforts were made by the Iroquois to import box turtle shells if they were not locally available. Second, the rattle is formed by lacing or gluing the plastron to the carapace. Third, the rattle inclusions must be white or cream quartzite pebbles, with rare additions of other rattle elements such as the teeth of fish. The only real deviation that was permitted in the manufacture of the rattle began around A.D. 200, when copper reproductions appeared in culturally advanced and rich Middle Woodland sites in Ohio. As customary, however, white quartzite pebbles were still the inclusions in the copper rattle.

It was more of a surprise to find the same variant in copper in a site such as the Mitchell Burial Mound, since the Mississippian culture had been heavily influenced by Mesoamerican civilizations, as manifested in the appearance of feathered serpent motifs, the symbol of Quetzalcoatl, examples of the Long Nose God in the form of masks, and pyramidal bases for temples and the residences of the elite. Apparently the box turtle rattle was an item of such profound significance that it remained essential to



Copper turtle shell ornaments. Mitchell Mound, Madison County, Illinois. MAI/HF 10/3327. L:2".

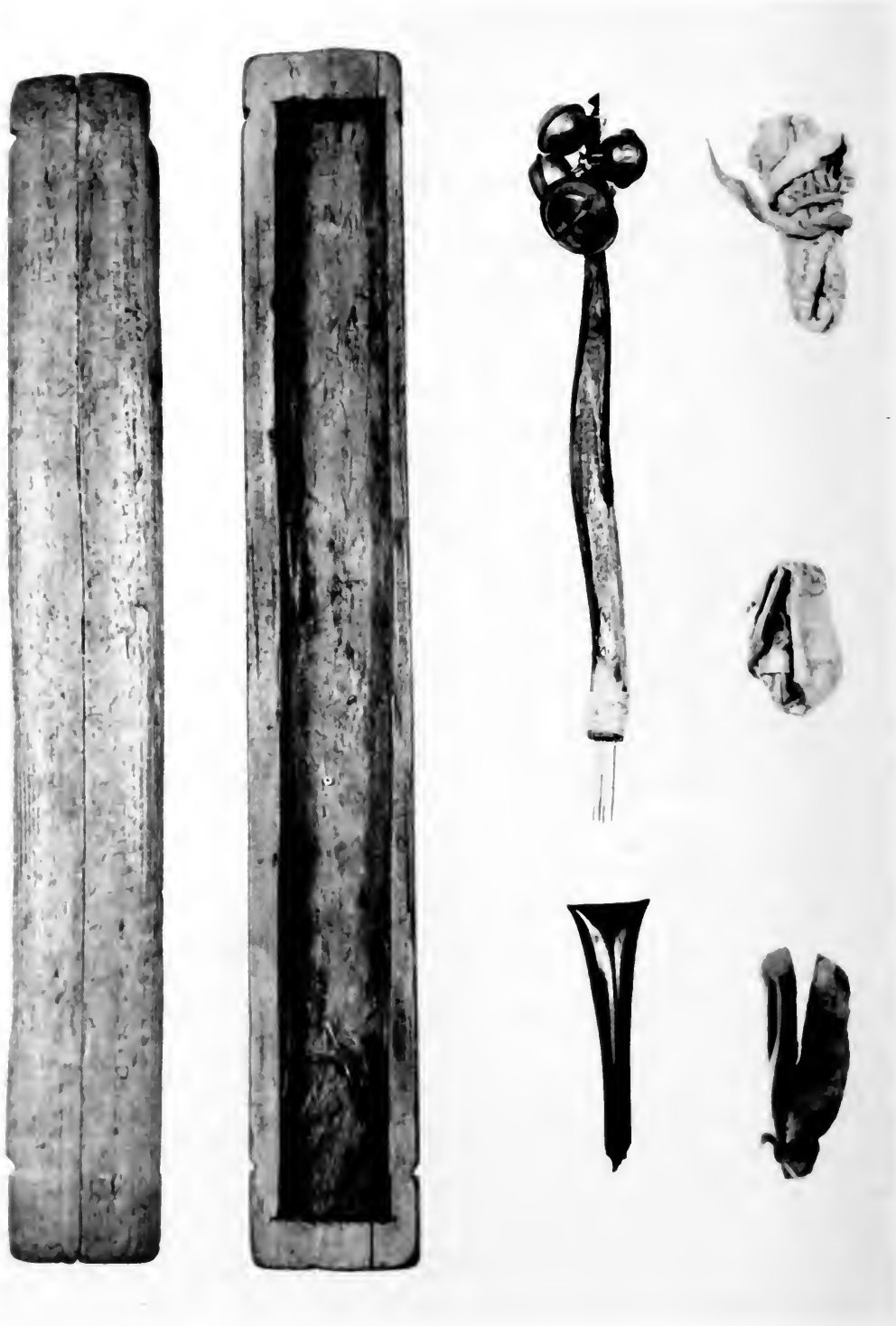
many eastern cultures, whether they were simple hunters and gatherers, or citizens of advanced city states that based their economies on intensive agriculture and trade. In a way, one is reminded of the Maya of present-day Yucatan. The elaborate pantheon encountered by the Spanish conquistadores has vanished, but today the simple Maya farmers quietly observe ceremonies appropriate to Chac, the rain god whose beneficent influence is petitioned to insure the successful growth of the maize and beans that are essential for the survival of the Mayan family. Perhaps the turtle shell rattle was also essential in eastern North America for insuring proper ties between the world of the living and the forces that provided the essentials that permitted their survival. This is not to say that the

Left to Right:
10/3331 Stick overlaid with copper 8¾" long; 10/3332 Four-pronged copper ornament; 10/3333 Deer jaw pendant overlaid with copper; 10/3334 Deer jaw pendant overlaid with copper; 10/3337 Fragments of flat wooden pendant overlaid with copper (2); 10/3329 Bone ear ornament overlaid with copper. Mitchell Mound, Madison County, Illinois. Collected in 1875.

needs, prayers, and the rites of the early hunters and gatherers were the same as those of the urbanized Indians of the Mississippi Valley, but merely that an essential item of ritual equipment remained the same, and that in such instances there are powerful social forces opposing change in traditional patterns of behavior and the symbols by which they are expressed. One might even compare it to the crucifix which has manifested a special, although varying, symbolism to a great variety of ethnic groups and cultures for over some two millennia.

A second aspect of theoretical interest is the observation that copper was generally hammered into paper-thin sheets and then applied over common local materials such as wood and bone, and that at other sites of the same general culture, larger copper ornaments such as gorgets were made by laboriously riveting together small pieces of sheet copper. As an explanation of this technological innovation characteristic of Mississippian utilization of copper in most of the separate city-states, one might propose that this was simply a way of increasing the profit of the enterprising copper artisan or a bauble utilized by a "social climber" to mislead other individuals as to the extent and success of his prowess in the economic sphere. But archeological evidence argues against such simplistic interpretations. Unlike the massive copper implements, ornaments, and ritual paraphernalia that accompanied the burials of important individuals during the millennium of the preceding *Pax Hopewelliana* of midwestern Middle Woodland cultures, the copper objects that accompanied many Mississippian burials of important or high-ranking individuals between A.D. 1000 and 1400 are generally the paper-thin appliqué or repoussé objects. Burials which by their context seem to be those of simple farmers, craftsmen, or ordinary villagers very rarely have copper in any form in association, and then only as a bead or two. Thus the copper objects may be regarded as symbols of a certain role, status, and rank.

The background for this particular innovation in technological efficiency in the use of copper may relate to events that took place in the Midwest at the end of the *Pax Hopewelliana* around A.D. 500, and the advent of what have been termed Late Woodland Cultures. These latter, which generally date between A.D. 500 and 900, are marked by two very significant characteristics. First, the vast trade network that had operated efficiently in eastern North America for over 3,000 years collapsed completely, and the two basic items in the system, marine shells from the Gulf of Mexico, and native copper from Lake Superior virtually disappeared from the hamlets, villages, cemeteries, and burial mounds. Second, at the same time, death by violence increased remarkably, as a result of clashes with alien Indian groups. The whole period seems to have been one of



Chippewa carved wooden container with plain wood top. For a tattooing outfit, used in curing lameness or rheumatism. Contains a needle decorated with stroud cloth and brass bells; a tiny elm bark rattle; birchbark packets of seeds and small buckskin paint pouches. Thunder Bay, Alpena County, Michigan. MAI/HF 24/1296. L:11¾".

rapid change with the collapse of old value systems, the breaking down of inter-group ties that had permitted continuous and quantitatively significant distribution of exotic raw materials from distant sources, and greater emphasis on the secular rather than the sacred in the annual life cycle. There was, apparently, a lesser employment of the resources of the society for ritual activities and the use of either ritual, utilitarian, or symbolic objects to accompany more than a very few of the dead, hundreds of whom are often found buried within a single earthen mound.

It is in this disruption of an earlier trade network that the production of thin sheet copper may have had its origin. Certainly, there was no dwindling of the available native copper on Ile Royale (Griffin 1961) since nineteenth century Americans found it economically profitable to exploit those same superficial deposits on a commercial basis. Instead, the disruptions that accompanied the appearance and spread of urban life and civilization within the Mississippi and adjacent valleys meant that access to the copper deposits on a regular basis became an impossibility without resort to military confrontation. The analogy cannot be precise, but the Mississippian Indians with their fortified frontier towns faced problems similar to those of the Romans who confronted other hostile Europeans beyond Hadrian's Wall and the garrisoned towns of central Europe.

Probably the interment of these carefully wrapped symbols of wealth, power and ritual in the Mitchell Burial Mound was one of the last scenes of the dying civilization that had produced a state that must have been as well known to the prehistoric inhabitants of eastern North America as Rome was to the tenth century kingdoms and principalities of the Mediterranean area. Certainly, however, by the time that the French explorers of the late seventeenth century passed through this section of the Mississippi Valley, Cahokia and the other Amerindian city-states had collapsed, been abandoned, and vanished from the memories of the historic Indian tribes.

While some historic southern groups, as the Natchez (du Pratz, n.d.), give us some idea of how these formative civilizations functioned, it is only through archeology that we are beginning to acquire the information needed for understanding their origins and development and what life was like in a vast metropolis like Cahokia. Archeology is also beginning to provide clues that will explain the abrupt demise of the Midwestern civilizations. As one might expect, while the particulars may differ from those of earlier European societies, the all-too-familiar factors of famine, pestilence, and warfare were the likely set of linked elements that contributed to the precipitous decline of the Mississippian states of the Midwest.

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ELLENDA WULFESTIEG INVITED TO ATTEND BRITISH MUSEUM SEMINAR

Ellenda Wulfestieg, our Conservator, is one of two persons who were selected to attend a seminar on the conservation of ethnographic and organic materials. The course will be of great benefit to both Miss Wulfestieg and to our Museum, since it will increase her knowledge and broaden the scope of Museum objects that she is able to treat and preserve.

The seminar which commenced this year on April 22, began with two weeks of formal lectures and visits to laboratories and workshops in the London area followed by four weeks spent receiving practical training in the British Museum Research Laboratory.

The British Museum, one of the oldest museums in the world, has one of the foremost conservation laboratories extant. Professionals with training from the British Museum and the Institute of Archaeology have been leaders in the conservation field both in research and in the daily task of saving the world's treasures.

Each year the British Museum Research Laboratory and the Department of Conservation of the Institute of Archaeology (which is part of the University of London) offer a practical seminar in selected topics of conservation. The aim of the course is to provide training and to bring together professionals from various parts of the world for an exchange of ideas and information relating to conservation. Two trainees are selected from applicants from all over the world to work in each of the following six areas: metals; ceramics and stone; library and archival materials; organic and ethnographic materials; archeological wall paintings; and the making of reproductions.

Support for this trip was provided by a grant from the United States Steel Foundation.

PUBLICATIONS

The Museum Shop has just issued a new edition of the catalogue *Books About Indians.* This 96-page listing includes titles from all publishers on the Indians of North, Central and South America. As the title indicates, the contents are concerned solely with Indians — their arts, crafts, customs, prehistory, languages, and current situation. An effort has been made to present a carefully selected list of publications, all of which are presently available from The Museum Shop. We believe this to be the most complete such selection available anywhere.

Although regularly priced at 75 cents to cover printing costs, this catalogue will be sent to members of the Museum for 25 cents postage. Only one copy per member, please!

Map of Peru with Archaeological Sites of the Middle Horizon Period

THE EXPANSION OF THE HUARI EMPIRE

Anna C. Roosevelt
Curatorial Assistant

Ancient conquests or missionary movements often appear archaeologically as the rapid spread of a distinctive art style. This archaeological phenomenon is called an "horizon" because of its wide geographical span and short temporal range. At three different times in prehistory, horizon styles spread through the Central Andes. The second of these horizons is especially interesting because it seems to have been the product of the first great Andean empire.[1] It is called the Middle Horizon because it lies chronologically between the two other horizons.

The earliest of the Peruvian horizons, known as Chavín, is characterized by the spread of a religious art style about 1000 B.C. There is no evidence of the establishment of Chavín administrative centers; rather, the art style seems to have been disseminated by a missionary movement, probably following the lines of a trading network (Lumbreras 1972). It is known through historical accounts that the latest of the horizons is the result of the Inca conquest of the Andes during the fifteenth and sixteenth centuries after Christ. The Inca horizon markers are found in the administrative centers established by the conquerors throughout the Andes and were apparently made for the use of officials of the Inca bureaucracy. Although the Middle Horizon, like the Early Horizon, is marked by the spread of a religious art style, it seems to represent the expansion of a conquest like that of the Inca. The Middle Horizon art styles are found in elite contexts throughout the highlands and part of the coast.

The Peruvian Middle Horizon styles are closely related in iconography to the art styles of Tiahuanaco, a large ceremonial site in the Titicaca Basin, Bolivia. It was, accordingly, originally thought that their spread was administered from Tiahuanaco. Recent work, however, has shown that, after the initial introduction of the Tiahuanaco iconography to Peru, the Peruvian sector of the Andes followed an independent development and was probably presided over by the city of Huari in the Ayacucho Basin.

[1]The history of the Middle Horizon has been clarified through the style studies of Dorothy Menzel of the University of California at Berkeley. The method of seriation used in these studies was developed by John Rowe, also of that institution (Rowe 1961). The view of events in the Middle Horizon presented here is essentially based on Menzel's hypothetical reconstruction. There are other current interpretations which do not admit the role of Huari as an imperial capital presiding over the Central Andes, but present evidence supports Menzel's thesis substantially. In addition, her interpretation is the most coherently worked out of those which have been presented so far.

Several explanations have been offered to explain why an empire arose at this time in Peru. One is that gradual improvements in domesticated plants and hydraulic technology over the previous thousand years had allowed the Central Andean population to grow to a size and density that stimulated the development of a highly centralized system of political organization (Lanning 1967:115). Another possibility is that climate change was involved in the cultural developments that led to the Huari Conquest (Paulsen 1971:6-9; Gary Vescelius, personal communication). The hypothesis is that increased rainfall during the period before the Middle Horizon opened up more land for cultivation, thereby creating a population explosion. Then, when rainfall dropped off at the beginning of the Horizon, the larger population put pressure on a decreasing amount of arable land, resulting in warfare and conquest for control of food resources. Substantial paleobotanical evidence for climate change has yet to be found, but the archaeological evidence confirms that the Huari state was just one of several growing regional kingdoms at the beginning of the Middle Horizon.

The effect of the Huari conquest was the replacement of the earlier system of villages and ceremonial centers with a hierarchy of villages, towns and cities (Schaedel 1966: Lumbreras 1969:233). Behind this change in settlement pattern was a centralization of political, economic, and religious organization in cities supported by the labor and produce of rural settlements. Although centralized rule disappeared with the collapse of the Huari state, the Central Andes never returned to the high degree of regional isolation that existed before the Huari conquest (Lanning 1967:140).

The rise of the Huari Empire was heralded by the appearance of a new ceramic style bearing Tiahuanaco iconographic motifs in the Ayacucho region at about A.D. 550 (Middle Horizon Epoch 1B).[2] At the time, the people of Ayacucho were living in small towns and villages, of which the largest was Huari. The Ayacuchans had a particularly close relationship with the inhabitants of the Nazca Valley on the West Coast, and their secular pottery was heavily influenced by the Nazca style. The Tiahuanacoid ceramics are found at only one site, Chakipampa, near the Ayacucho suburb, Conchopata, for which it is named. Conchopata vessels are very large and were smashed intentionally in special ritual cache pits. Their decoration consists of polychrome mythological themes that seem to

[2]Because of difficulties in correlating radiocarbon dates for Peru, the Middle Horizon could be placed at least a hundred years earlier or later (Menzel, 1969: note 3.) The dating used in this paper was formulated by G. S. Vescelius.

be copies of figures that adorn the monumental architecture of Tiahuanaco (Menzel 1964:19-20).

The most prominent of the Conchopata figures is the central deity of the great stone gateway at Tiahuanaco. This is an anthropomorphic creature with rectangular face and feline muzzle. His headdress is made up of radiating serpents, and in each hand he holds a staff tipped with the heads of predatory birds. He is flanked on either side by winged running figures with both bird and feline attributes.

Although the iconography of Conchopata ceramics is essentially borrowed from that of Tiahuanaco, the ceramic technology and style are closer to local Ayacuchan techniques (Lumbreras 1969:242). No examples of Conchopata style pottery have been found in the Titicaca Basin, and no Tiahuanaco pottery has turned up in the Huari sphere of influence. The secular Ayacucho ceramic of this time is almost completely free of Tiahuanaco influence. Apparently, the introduction of Tiahuanaco religion had little effect on the daily life of the Ayacuchans at first (Menzel 1864:66-67). The scarcity of Conchopata style pottery suggests that it was used strictly for ritual purposes by a small number of people. This small but important group may have been missionaries from Tiahuanaco or Ayacuchans who had been on a pilgrimage to Tiahuanaco (Menzel 1964:66-67; Lumbreras 1969:242).

By about A.D. 600 (Middle Horizon Epoch 1B), a new style of oversized Tiahuanacoid ritual ceramics appeared not only at Chakipampa, but also at Huari, and Pacheco in the Nazca Valley. The style is named Robles Moqo, after a small hill at Huari where sherds of the ceramic have been found. The Robles Moqo style (see figure 1) bears features related to Tiahuanaco ceramics as well as those borrowed from the stone carvings, which indicates that contact with the Titicaca Basin had been renewed (Lumbreras 1969:244). Since Nazca features are also incorporated into the ritual ceramics, it appears that a closer relationship was developing between the local people and the users of the ritual wares. An ordinary sized variety of Robles Moqo style ceramics has a wider distribution than the oversized vessels. It has been found at Huari, Pacheco, several other sites in the Nazca Valley and at Cerro del Oro in the Canete Valley. The fact that Pacheco's Robles Moqo style pottery is closer to Huari's than that of Chakipampa is evidence that Huari had already become predominant in the Ayacucho Basin at this time.

It is the wide distribution of a contemporary secular Ayacuchan ceramic style, Chakipampa B, that suggests that the conquest was already under way. Chakipampa B style pottery was made locally over a large section of the coast, from Acari in the south to Chancay on the Central

Figure 1. Large polychrome urn from Pacheco, decorated with the image of the Gateway God of Tiahuanaco, and plant motifs. Robles Moqo Style. Peru. Middle Horizon Epoch 1. (Photograph courtesy of the American Museum of Natural History.)

Coast. (See figure 2.) In the highlands, local varieties have been found as far north as Huamachuco, and trade wares occur even farther north in the vicinity of Huaraz (Thatcher Vescelius, personal communication). Since it is a style of secular service ware that is most widely disseminated during this period, it seems likely that the mechanism of its spread was direct political control backed by military force rather than a religious movement (Menzel 1964:680; Lumbreras 1969:244, 246). Huari probably directed the spread of Ayacuchan influence as it was the largest and most important settlement in the basin during this period.

In the next period of the expansion, starting about A.D. 650 (Middle Horizon Epoch 2A) contact with Tiahuanaco ceased, and Huari gained even greater preeminence over other settlements in the region of Ayacucho. The site seems to have drawn to itself much of the population of nearby centers, which had been heavily populated during the previous period (Menzel 1964:69-70; Lumbreras 1969:254).

By this time, Huari was a large city laid out in rectangular compounds made of fieldstones set in mud plaster. The administrative and ceremonial nucleus is about three square kilometers in size (Gary Vescelius, personal communication). Because of its size and complexity, the site has never been completely mapped or sampled adequately, but it is clear that the site extends far beyond the boundaries of the administrative nucleus. Surveys and excavations carried out recently have revealed that the compounds contain large residential rooms lined with white plaster, many small storerooms, and craft workshops. An elaborate system of channels and aqueducts supplied water to the city from several kilometers away. It is obvious that Huari society was characterized by many of the hallmarks of civilization: marked differentiation in social status, intense occupational specialization, hydraulic agriculture, monumental architecture and art, and urbanism.

Figure 2. Ceramic cup with polychrome decoration similar to the type found on Middle Horizon tapestry shirts. Huari group, Middle Horizon Epoch 2. Peru. MAI/HF 16/8871. H: 4 in.

Figure 3. Polychrome double-spouted vessel decorated with the image of a profile of a raptorial bird. Huari Group, Middle Horizon Epoch 2. Peru. MAI/HF 24/3817. H: 5½ in.

Throughout the Huari sphere of influence at this time the secular service wares of the previous period were replaced by a series of new styles, the Huari group, with the Viñaque style emanating from Huari, the Atarco style from the Nazca region, and the Pachacamac style from the Central Coast. Oversized ritual pottery continued to be made in small quantities, notably in the Nazca area. The geographical span of the Huari group is approximately the same size as that of the Chakipampa B style, but there is a significant increase of interpenetration of iconography and stylistic features between the secular and religious ceramics (Menzel 1964:70). This process may be a reflection of the consolidation of political control over conquered settlements. (See figures 3, 4 and 5.)

The Huari empire reached its greatest expansion between A.D. 700 and 750 (Middle Horizon Epoch 2B). Viñaque and Viñaque-influenced pottery spread over a wide area stretching from the North Highlands to the Titicaca Basin and from the North Coast to the distant South Coast. Huari style urban centers were built at Pikillaqta in the Cuzco Basin, Viracocha Pampa in the vicinity of Huamachuco, Onqo Pampa, near Huaraz, and at other sites in the highlands (Rowe, Collier, and Willey 1950:123; McCown 1945; Gary Vescelius, personal communication; Thatcher 1974). On the

Figure 4. Polychrome vessel depicting a man wearing a tapestry shirt similar to that in Figure 6. Huari style, Middle Horizon Epoch 2. Peru. MAI/HF 23/6464. H: 7 in.

North Coast, Huari-style towns superseded the local ceremonial centers in importance, and roads, canals, and terraces were expanded (Lumbreras 1969:256).[3] Throughout the coastal region large cemeteries rich in fancy textiles, jewelry, and pottery attest to the growth of a sizeable and wealthy provincial elite (Lumbreras 1969:259). (See figures 5 and 6.) A number of the provincial centers, like Pachacamac, gained such large spheres of influence that they might properly be considered as independent powers in their own right (Gary Vescelius, personal communication; Lumbreras 1969:259).

At the end of this phase, the Huari empire lost its coherence; the city of Huari became a settlement of squatters. The production of Viñaque pottery ceased, and the population of the Ayacucho region was drastically reduced (Menzel 1964; Lumbreras 1969:252). Although some of the provincial settlements, Pachacamac on the Central Coast, and sites in the Ica, Chancay, and Huarmey valleys, continued to flourish and produce Tiahuanacoid ceramics, their extra-regional contacts gradually decreased, and new regional ceramic complexes evolved out of the Imperial styles.

Figure 5. Polychrome wool pile cap with geometric decoration. Late Middle Horizon Period. Chimbote, Ancash, Peru. MAI/HF 22/3722. 3½ in. x 5½ in.

[3]Evidence collected by the Chan Chan project of Harvard University suggests that at least one large urban center laid out in compounds had been built on the North Coast before the Middle Horizon Period (Richard Keatinge, personal communication). However, the great increase in the numbers of such sites and the appearance of Huari influenced pottery during the Middle Horizon supports the theory that the spread of urbanism on the North Coast of Peru was related to the Huari conquest.

From a rather modest beginning as just one of many growing regional states or kingdoms, Huari accomplished the cultural unification of most of the Central Andes. The cultural history of the area strongly supports the interpretation of Huari's role as that of capital of a political empire, but additional local ceramic sequences must be worked out before it is clear exactly what degree of economic and political unification lay behind the enormous prestige of Huari religion and art.

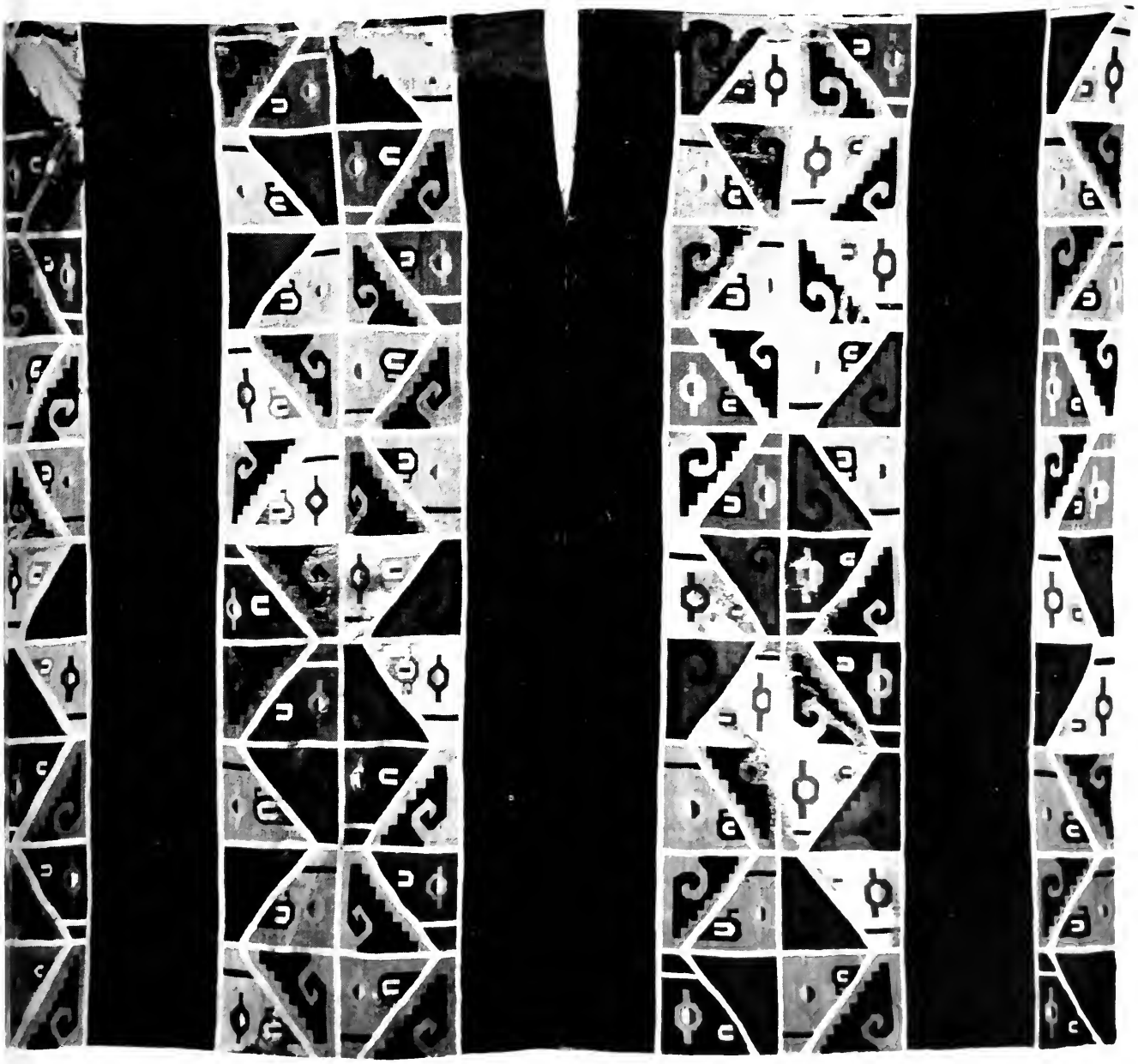

Figure 6. Polychrome wool tapestry shirt bearing designs of scrolls and stylized feline heads. Middle Horizon Epoch 2. Lima, Peru. MAI/HF 23/8338. 40 in. x 42 in.

The sudden collapse of the Huari empire is something of an enigma. At first, some of the provincial Huari centers were not affected by the fall; it is possible that one or more of them had grown in independence to the point where a revolt could be mounted against Huari's political control against the capital (Lumbreras 1969:255). On the other hand, population pressure on static or shrinking food resources may have led to the collapse of the Huari economic system. Or, finally, it is possible that the Huari conquerors had extended their control beyond the capability of their bureaucratic methods to maintain an imperial structure over the diverse and distant ecological zones of the Central Andes (Lanning 1967:140). Whatever its cause, the disintegration of the Huari state signalled the end of urban living in the Highlands. Although city building rose to new heights on the North Coast in the next period, the Inca achieved their conquest of the Andes essentially without it.

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ANCIENT WEST INDIAN ARROWHEADS

Alfredo E. Figueredo
Research Associate

In most parts of the world, arrowheads are among the commonest of archaeological objects. This, however, is not true in the West Indies, and that is why the Museum of the American Indian is singularly lucky in possessing a fair number of Antillean projectile points. This article is the first published reference to all but one of them.

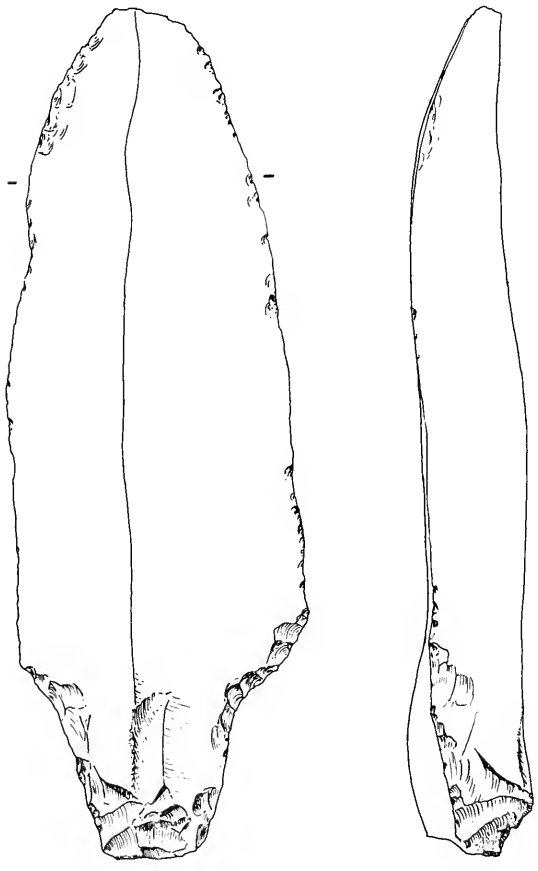
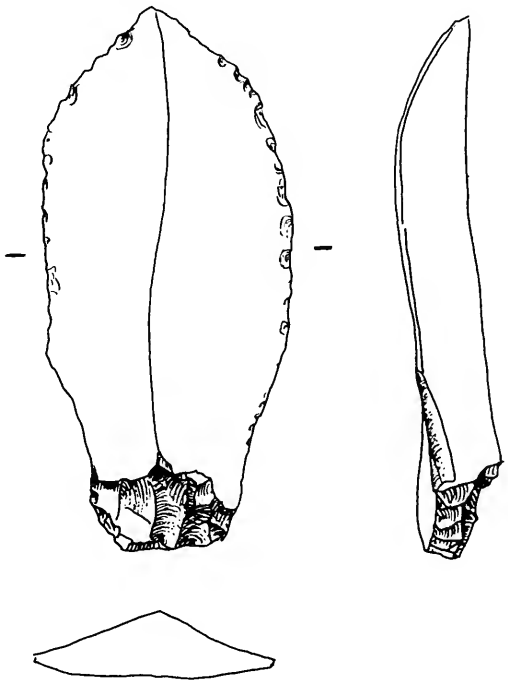


Figure 1. Spearhead of fine quality flint, from the vicinity of Santiago de los Caballeros, Dominican Republic. MAI/HF 12/9912 (*Sketch by J. M. Gross*).



Figures 2. Spearhead of fine quality flint, from Monte Cristo, eastern Cuba. MAI/HF 4/2316 (*Sketch by J. M. Gross*).

The first specimen, 12/9912, was collected by H. E. Hurst in the vicinity of Santiago de los Caballeros, Dominican Republic. It is related

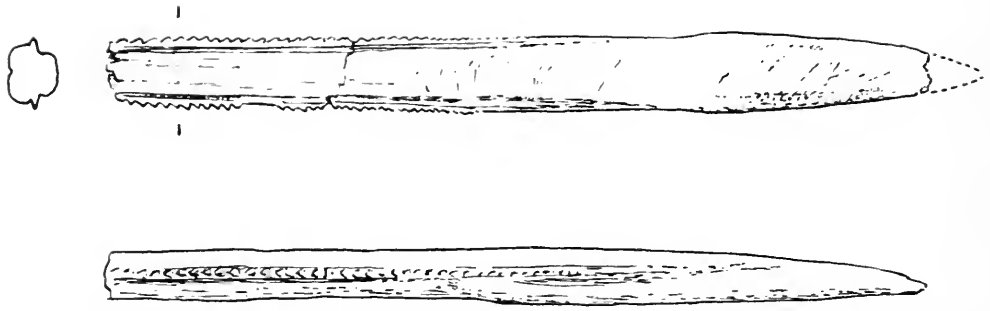


Figure 3. Sting-ray spine projectile point from Big Wall Site, eastern Cuba. MAI/HF 4/5803 (*Sketch by J. M. Gross*).

typologically to preceramic ground sloth-hunting cultures that have been radiocarbon-dated to *ca.* 800 B.C. for that part of Hispaniola. This particularly fine specimen was apparently used as a stabbing weapon, since it is larger than one would expect in a missile.

Specimen 4/2316 is from Monte Cristo, eastern Cuba, and was collected by M. R. Harrington during a survey of that country. Similar in manufacturing technique and morphology to 12/9912, yet smaller, it too may have been used as a stabbing weapon of the kind that Spanish explorers called *azagayas.* Since it was found associated with late Chicoid ceramics of the Taino cultural complex, this artifact illustrates the survival of preceramic flaking techniques well into ceramic times.

The next specimen, 4/5803, is a sting-ray spine arrowhead from the Big Wall Site. Also from eastern Cuba, it has the same cultural association as the preceding artifact, and was collected by M. R. Harrington. This is the first publication of a drawing of one of these points; indeed, the two in our collections seem to be the only ones found thus far, which is surprising, since early accounts repeatedly mention them as a prominent part of the Indian tool kit. Our specimens are similar to other sting-ray spine points from Central and South America, but this may be due to the morphological limitations of the material and not to cultural diffusion.

The next set of specimens offer a striking departure from the

Figure 4. Hafted knives from northwestern St. Croix, of gray chert. MAI/HF 18/7103 (*Photograph by Carmelo Guadagno*).

established flaking techniques of the Antillean preceramic cultures. Indeed, there is much in them that seems "standard," and they may lose themselves in collections from other parts of the world—save for differences that are difficult to see at first.

Specimens 18/7103 were collected by Lewis J. Korn in the northwestern end of St. Croix, Virgin Islands. While at first glance they seem to be projectile points, and would be so labelled by most archeologists, on closer inspection it is easy to note that one edge curves more than the other; these are apparently hafted knives and not meant to be thrown or penetrate at all. Three similar specimens from the same island are at the Virgin Islands Museum, Charlotte Amalie, St. Thomas.

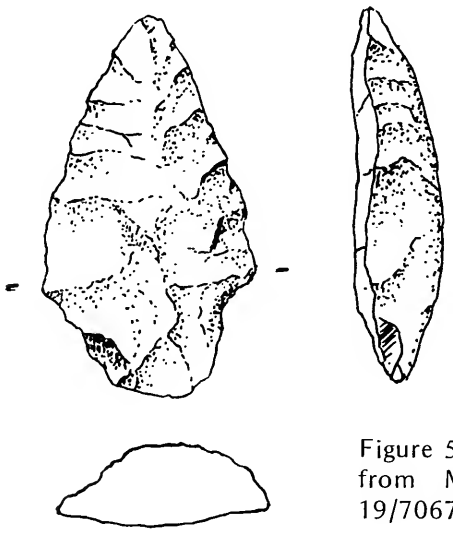


Figure 5. Hafted knife of white quartizite, from Morovis, Puerto Rico, MAI/HF 19/7067 (*Sketch by J. M. Gross*).

Our last specimen, 19/7067, is one of four collected and donated by Mrs. Alice de Santiago from the Barrio de Unibone, Morovis, Puerto Rico. While the one illustrated would seem to be a projectile point, one can observe that in cross-section it is far too thick. The other three are somewhat thinner, but they all show the one markedly curved side that characterizes the St. Croix specimens, and are also, apparently, hafted knives. A "projectile point" found by Mayo Carrington in eastern Cuba resembles our illustrated Puerto Rican specimen, and may be a hafted knife as well.

From the preceding we can conclude that stone points for stabbing weapons persist as part of a single flaking tradition from preceramic to very late ceramic times; also, it seems clear that West Indian aborigines did use the bone projectile points that figure in the literature, and that a new flaking tradition applied to hafted knives entered the West Indies, presumably from South America.

LILLIAN RED WING ST. CYR

1884–1974

We deeply regret the passing of a good friend of the Museum. Red Wing died on Tuesday, March 19th, after a long illness. She was ninety years old. She was well known as Nat-u-rich, the leading player in Cecil B. DeMille's 1914 film *The Squaw Man,* the first feature-length film to be made in Hollywood.

To many of us, an even more memorable quality was her fine craftsmanship — she was an excellent beadwork artist. She was a student at Carlisle Indian School, and following graduation, she played for many years opposite Tom Mix and other stars of the silent screen era. She is the last of the true Old Timers, and the tune *Redwing* will always remind us of her vitality and beauty.

BERYL BLUE SPRUCE

1934–1974

The sudden death of Dr. Beryl Blue Spruce, one of the nation's leading physicians, came as a shock recently. Born of Laguna-San Juan parentage in Santa Fe, New Mexico, he was educated in Santa Fe and at Stanford. He subsequently earned an M.D. degree from the U.C.L.A. School of Medicine, and a M.P.H. from the University of Michigan, where he taught for many years. He was long active in the efforts to improve the health conditions of his people.

He was married to Ernestine Rodriguez, and had two daughters. His brother, Dr. George Blue Spruce, Jr., is a well-known dentist in the U.S. Public Health Service.

STEPHEN MOPOPE

August 27, 1889 – February 3, 1974

One of the last of the "Five Kiowa artists," this fine painter died at Lawton, Oklahoma, at the age of seventy-three. He was born on the Kiowa Reservation near Red Stone Mission, and was a descendant of Appiatan, a noted Kiowa warrior. He was known to his people as *Qued Koi* (Painted Robe), for his talent in art.

He was one of the most prolific of the young artists trained by Dr. Oscar Jacobson, who did so much to introduce traditional Indian painting to the contemporary non-Indian art world. He is best known for his dancers – he was a champion dancer himself – and his work hangs in many museum and private collections around the world. He was the designer of the official seal of Indian City, in Anadarko. He was married to Janet Berry with whom he had two daughters.

The Museum is proud to possess many examples of Mopope's paintings, one of which is featured on a greeting card, below.

EAGLE DANCERS (1929) Stephen Mopope

JAGUAR MASK
Acatlan, Puebla 16"x22"

MEXICAN MASKS

OUR NEXT SPECIAL EXHIBITION

The Museum has recently been the recipient of a superb collection of 120 carved and painted wooden masks from Mexico dating between 1850 and 1950. They include the great range of animal, devil, human and "fantastic" images which are employed in the many folk ceremonies observed throughout the country.

The collection was presented to us by Mrs. Vivian Merrin and Mr. Samuel Lindenbaum, and will form the basis for a Special Exhibition which will open on Wednesday evening, October 9th, and continue for the balance of the year. Other examples from the Museum collection will be included to portray the use of masks in Mexico as early as the Olmec period, rare clay masks from Tlatilco and Chupícuaro, and carefully-crafted shell and stone masks, all to demonstrate the continuum of this custom from ancient times to 1970.

Members will receive an invitation to this event shortly.

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